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Cys Arg Leu Ala Pro Leu Ile Gln Val Ile Leu Asp Cys Ser His Leu

Tyr Asp Tyr Thr Val Lys Leu Leu Phe Lys Leu His Ser Cys Leu Pro

Ala Asp Thr Leu Gln Gly His Arg Asp Arg Phe Met Glu Gln Phe Thr 75

Lys Leu Lys Asp Leu Phe Tyr Arg Ser Ser Asn Leu Gln Tyr Phe Lys

Arg Leu Ile Gln Ile Pro Gln Leu Pro Glu Asn Pro Pro Asn Phe Leu

Arq Ala Ser Ala Leu Ser Glu His Ile Ser Pro Val Val Val Ile Pro 125

Ala Glu Ala Ser Ser Pro Asp Ser Glu Pro Val Leu Glu Lys Asp Asp 135 130

Leu Met Asp Met Asp Ala Ser Gln Gln Asn Leu Phe Asp Asn Lys Phe 150 145

Asp Asp Ile Phe Gly Ser Ser Phe Ser Ser Asp Pro Phe Asn Phe Asn 165 170

Ser Gln Asn Gly Val Asn Lys Asp Glu Lys Asp His Leu Ile Glu Arg 180 185 Leu Tyr Arg Glu Ile Ser Gly Leu Lys Ala Gln Leu Glu Asn Met Lys 195 Thr Glu Ser Gln Arg Val Val Leu Gln Leu Lys Gly His Val Ser Glu 215 210 Leu Glu Ala Asp Leu Ala Glu Gln Gln His Leu Arg Gln Gln Ala Ala 235 230 Asp Asp Cys Glu Phe Leu Arg Ala Glu Leu Asp Glu Leu Arg Arg Gln Arg Glu Asp Thr Glu Lys Ala Gln Arg Ser Leu Ser Glu Ile Glu Arg Lys Ala Gln Ala Asn Glu Gln Arg Tyr Ser Lys Leu Lys Glu Lys Tyr 280 Ser Glu Leu Val Gln Asn His Ala Asp Leu Leu Arg Lys Asn Ala Glu Val Thr Lys Gln Val Ser Met Ala Arg Gln Ala Gln Val Asp Leu Glu Arg Glu Lys Lys Glu Leu Glu Asp Ser Leu Glu Arg Ile Ser Asp Gln Gly Gln Arg Lys Thr Gln Glu Gln Leu Glu Val Leu Glu Ser Leu Lys Gln Glu Leu Ala Thr Ser Gln Arg Glu Leu Gln Val Leu Gln Gly Ser 355 365 360 Leu Glu Thr Ser Ala Gln Ser Glu Ala Asn Trp Ala Ala Glu Phe Ala 370 Glu Leu Glu Lys Glu Arg Asp Ser Leu Val Ser Gly Ala Ala His Arg 385 390 395 400 Glu Glu Glu Leu Ser Ala Leu Arg Lys Glu Leu Gln Asp Thr Gln Leu 405 Lys Leu Ala Ser Thr Glu Glu Ser Met Cys Gln Leu Ala Lys Asp Gln 420

Arg Lys Met Leu Leu Val Gly Ser Arg Lys Ala Ala Glu Gln Val Ile 440 Gln Asp Ala Leu Asn Gln Leu Glu Glu Pro Pro Leu Ile Ser Cys Ala Gly Ser Ala Asp His Leu Leu Ser Thr Val Thr Ser Ile Ser Ser Cys Ile Glu Gln Leu Glu Lys Ser Trp Ser Gln Tyr Leu Ala Cys Pro Glu 490 Asp Ile Ser Gly Leu Leu His Ser Ile Thr Leu Leu Ala His Leu Thr Ser Asp Ala Ile Ala His Gly Ala Thr Thr Cys Leu Arg Ala Pro Pro 525 Glu Pro Ala Asp Ser Leu Thr Glu Ala Cys Lys Gln Tyr Gly Arg Glu 535 530 Thr Leu Ala Tyr Leu Ala Ser Leu Glu Glu Glu Gly Ser Leu Glu Asn 545 550 Ala Asp Ser Thr Ala Met Arg Asn Cys Leu Ser Lys Ile Lys Ala Ile 565 570 Gly Glu Glu Leu Pro Arg Gly Leu Asp Ile Lys Gln Glu Glu Leu Gly Asp Leu Val Asp Lys Glu Met Ala Ala Thr Ser Ala Ala Ile Glu 595 Thr Ala Thr Ala Arg Ile Glu Glu Met Leu Ser Lys Ser Arg Ala Gly 610 615 Asp Thr Gly Val Lys Leu Glu Val Asn Glu Arg Ile Leu Gly Cys Cys Thr Ser Leu Met Gln Ala Ile Gln Val Leu Ile Val Ala Ser Lys Asp 650 Leu Gln Arg Glu Ile Val Glu Ser Gly Arg Gly Thr Ala Ser Pro Lys

Glu Phe Tyr Ala Lys Asn Ser Arg Trp Thr Glu Gly Leu Ile Ser Ala Ser Lys Ala Val Gly Trp Gly Ala Thr Val Met Val Asp Ala Ala Asp 690 695 Leu Val Val Gln Gly Arg Gly Lys Phe Glu Glu Leu Met Val Cys Ser 715 His Glu Ile Ala Ala Ser Thr Ala Gln Leu Val Ala Ala Ser Lys Val Lys Ala Asp Lys Asp Ser Pro Asn Leu Ala Gln Leu Gln Gln Ala Ser 745 Arg Gly Val Asn Gln Ala Thr Ala Gly Val Val Ala Ser Thr Ile Ser Gly Lys Ser Gln Ile Glu Glu Thr Asp Asn Met Asp Phe Ser Ser Met 780 Thr Leu Thr Gln Ile Lys Arg Gln Glu Met Asp Ser Gln Val Arg Val Leu Glu Leu Glu Asn Glu Leu Gln Lys Glu Arg Gln Lys Leu Gly Glu Leu Arg Lys Lys His Tyr Glu Leu Ala Gly Val Ala Glu Gly Trp Glu 825 Glu Gly Thr Glu Ala Ser Pro Pro Thr Leu Gln Glu Val Val Thr Glu Lys Glu Ser Gln Thr Asn Thr Pro Tyr Val Ser Val Asn Pro Cys Tyr 860 Leu Ser Arg Val Cys Tyr Phe Pro Ser His Arg Pro Asn Pro Trp Ser 870 865 Pro Arg Gly Ser His Thr Thr Ala Ile Thr Gln Cys Arg Gly His Ala His Phe Gln Arg Leu Pro Pro Arg His Pro Phe Cys Leu Asp Pro Trp

910

905

900

Ile Ser Thr Ala Ser Tyr Gly Gly Trp Leu Gly Phe Leu Val Leu Phe 915 920 925

Phe Phe Phe Lys Phe His Ser His Ser Gln Leu Ser Gln Arg Ala His 930 935 940

Pro Trp Gly Val Ser Arg Ala Pro Gln Leu Trp Leu Gln Arg Trp Cys 945 955 960

Cys Pro Gly Leu Ser Val Leu His Leu Arg Leu His Thr Asp Gln Val 965 970 975

Leu Ala His Pro Val His Ala Pro Gly Ser Gly Gly Ala Ala Glu Gln 980 985 990

Leu Ser Ser Lys Ser Arg Arg Val Ser Ala Phe Pro Ser Ser Ile 995 1000 1005

Pro Ala Glu Ser Leu Cys Pro Pro Leu Gln Gly Arg Gln Gln 1010 1015 1020

Lys Glu Gly Gln Glu Gly Ser His Ser Pro Val Pro Val Thr Arg 1025 1030 1035

Leu Lys Asn Leu Ile Thr Cys Leu Asn Gly Ala Gly Glu Ile Asn 1040 1050

Asn Thr Thr Ser Leu Pro Glu Thr Val Arg Glu Trp Ser Leu Ser 1055 1060 1065

Ser Gly Pro Ser Pro Leu Ala Gln Arg Arg Ser Val Gly Val Ile 1070 1075 1080

Pro Asn Ser Phe Leu Gln Thr Ser Ala Leu Ala Ser Ser Ile Gly 1085 1090 1095

Arg Ser Phe His Leu Leu Arg Asn Gln Thr Arg Lys Ile Arg Cys 1100 1110

Asn Cys Ser His Gln Gly Arg Thr Leu Tyr Leu Val Cys Tyr Pro 1115 1120 1125

Tyr Leu Leu Leu Thr Ser Leu Lys Gln Gln Gln Pro Thr Lys Arg 1130 1135 1140

Cys Leu Glu Gln Ser Glu Leu Gln Val Leu Gln Ser Ser Phe 1145 1150 1155

Cys Pro		Thr	Ser	Ala	Phe 1165		, Asn	Gln	Lys	Lys 1170	Gly	Gln	Gly	
Ala Gly		Leu	Leu	Thr	Trp 1180	Ile	Pro	Lys	Gln	Gly 1185	Asp	His	Leu	
Glu Leu 119		Gly	Gln	Arg	Lys 1195		Arg	Thr	Glu	Pro 1200		Ala	Pro	
Thr Pro		Ser	His	Met	Pro 1210		Ala	Leu	Ala	Ala 1215		Trp	Thr	
Gly Gly		Arg	Ala	His	Glu 1225	Gln	Leu	Ala	Arg	Asp 1230	Gly	Gln	Pro	
Asn Ser 123		Phe	Pro	Leu	Leu 1240		Gly	Pro	Gln	His 1245		Ser	Asp	
Leu Leu 125		Leu	Gly	Lys	Gln 1255	Arg	Leu	Pro	Ser	Leu 1260	Ser	Ile	Ala	
Thr His		Trp	Pro	Ser	Ser 1270	Thr	Ser	Glu	Phe	Leu 1275	Gln	Pro	Gly	
Arg Pro		Glu	His											
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ccattaatac	gcaggaaagt	ggctgtaaag	gaaaaacatg	ccaq		404